

ANALYSIS OF THE TRENT UNIVERSITY CERAMIC COLLECTION FROM THE KRIEGER SITE NEAR CHATHAM

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INTRODUCTION

This paper will give a brief overview of the history of the study of the Krieger Site, then discuss the Krieger ceramics present in the collections of the Department of Anthropology, Trent University.

The Krieger site was one of the first Late Woodland period occupations in Kent County to undergo extensive and documented investigations, albeit limited to Kidd (1954). Over the years this site has been attributed to the Glen Meyer phase (ca. 900-1300 A.D.) of the Ontario Iroquoian Late Woodland Tradition, the Younge phase (ca. 800 or 900-1200 A.D.) of the Western Basin Tradition, and even identified as a late (ca. 500 A.D.) Middle Woodland occupation (Kidd 1954; Murphy and Ferris 1990; Wright 1966). This study, then, is to try and sort out, relying on the Trent University collections of ceramics from Krieger, where the site does fit, and if it may not in fact represent multiple periods of occupation.

PAST INVESTIGATIONS AT THE KRIEGER SITE

The Krieger site is located in Harwich township, Kent county, north-east of Chatham on the Thames River (Figure 1). The site is approximately 100 metres east of the river bank, at the edge of the flood channel, on a flat to gently undulating plateau (Last 1974:1). Kidd (1954:173) maintained that the site was "probably extensive," although he found no house structures, hearths or fortifications, and excavated only pits.

The existence of an archaeological site on the farm of W.R. Krieger, was brought to the attention of Kidd, then at the Royal Ontario Museum, by letter and photograph, sent from Neil Coppieters, dated November 14, 1948 (Kidd 1954:141). Some digging was undertaken by Coppieters and Stan Wortner in 1948, uncovering "23 pits and two or three burials" (Kidd 1954:141).

Kidd led a crew of six in an excavation at the site in June of 1949, and the results were published in 1954 (Kidd 1954:141). Kidd (1954:144) noted: "...this area has been cultivated for a century or more; hence, can be by no means considered undisturbed ground....[these include] (1) cultivation; (2) the burial of farm animals; (3) the scraping of large areas; and last but not least, (4) erosion."

In 1966, Wortner donated his collection of ceramics from the site to Trent University, through Kidd (Last 1974). Subsequently, in October of 1970, Trent University explored the site under the supervision of R.I. Inglis, with the inclusion of Wortner as a crew member. The Trent crew opened a total of twelve five-foot squares, and excavated in somewhat arbitrary levels until sterile subsoil was

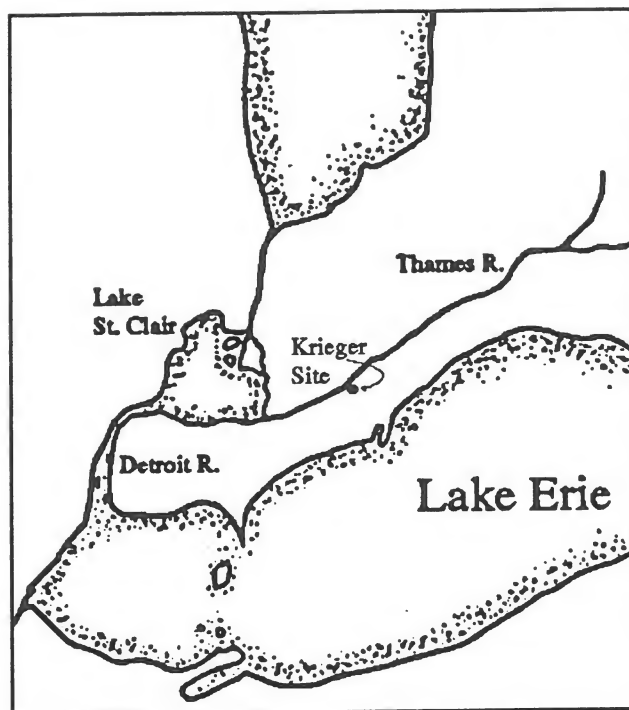


Figure 1: Location of the Krieger Site.

reached. The area was still under cultivation as of 1970, and soil disturbance as a result of agricultural practices and animal action was noted. Much of the ceramic material was recovered from pits where it was found in association with charcoal, bone fragments, and shell. One 5 x 5 foot unit contained a concentration of fire cracked rock, charcoal, and a number of small nodules of fired clay, all of which were collected (Last 1974).

While pottery, animal bone and shell formed the largest part of the assemblage collected, one human skull was uncovered in a pit lined with a hard, compact, orange clay-like soil. The skull is described in the field notes as belonging to an adolescent, with a possible trephination hole just below the temporal suture behind the orbit. A charcoal sample was taken from around the skull, as was one from a strip of charcoal found southeast of the skull. There was no sign of other human bone associated with the skull, and when it was removed, a "very small area of ash was found immediately beneath the skull" (Last 1974).

Unfortunately, the surviving field notes are frustratingly incomplete, exist only as poor photocopies, and are largely unpaginated. The maps drawn at the time are crude, and do not adequately represent the distribution of the ceramics and other artifacts recovered from the site. In addition, no complete site map of the excavation has ever been attempted. Material from the Trent excavation was catalogued, but no analysis was published.

CULTURAL AFFILIATION OF THE KRIEGER SITE

Kidd (1954:176) assigned the Krieger Site to a Late Woodland culture with "its centre in southwestern Ontario", but acknowledged similarities with the Younge and Wolf sites in Michigan. At the time Kidd was writing the Western Basin Tradition was poorly understood, but he attempted to place the site into a framework with surrounding sites.

Last (1974:2) assigned the site to the Glen Meyer, but the field notes from the Trent excavations offer no justification. However, based on Kidd's 1954 paper and collections at the Chatham-Kent Historical Museum, Murphy and Ferris (1990:226) assigned the Krieger site to the Younge phase. A radiocarbon date of 1350 BP \pm 140 (600 AD), calibrated to 425-900 AD, was obtained from the site (Murphy and Ferris 1990:226).

Murphy and Ferris were only able to identify two warm weather Younge Phase sites within the southwestern Ontario river drainage system: Dymock and Krieger. They write:

If the Dymock Site is the norm for river occupations, then it is possible, unlike in south Essex County, the Younge Phase peoples established more substantial base camps during warm weather periods. It is possible that Krieger represents another such site, as suggested by the abundance of faunal remains and presence of maize. However, Dymock's unique geographic position leaves open the possibility that it may be anomalous. For instance, it is possible that Krieger... was established primarily to take advantage of species found in and around the Thames River (1990:243).

KRIEGER CERAMICS

In his discussion of the ceramics from Krieger, Kidd (1954:155) defines them as fine-tempered, with a texture that is "generally speaking, poor." The pottery is "full of bubbles and air holes, porous and rough in aspect" (Kidd 1954:155).

Trent University Collection

According to the Trent University field notes:

The pottery found at the Krieger site was, in general, tawny in colour, imperfectly fired, fairly thick, coarse in texture and porous. A fine temper of crushed quartz had been used. A great number of the sherds had exfoliated or exhibited a tendency to do so. Usually the exterior showed decoration of several kinds and combinations and the interior was plain except for occasional grass-scratching. Types of decoration include the use of incising, stamping, the cord-wrapped stick and punctation. The Woodland character [sic] smooth basket-impressed stamp was often found on the body of the pot combined with incision on the neck, a feature of Iroquois pottery.... Punctation

was generally in parallel rows on the rim and neck. Rims, necks and shoulders were also decorated with impression of linear, dentate and complex stamps. The material found at the Krieger site in October, 1970 was for the most part of this nature except where otherwise specified (Last 1974:100)

The Krieger ceramics at Trent University contains two sets of ceramics. The first, consisting of a total of 381 sherds, is from the Trent excavations of 1970, with context adequately documented. The second set consists of 150 sherds donated to Trent University by Stan Wortner in 1966 through Kenneth Kidd. There is no accompanying data or provenience for this set. All 150 sherds in this set, which includes 4 rim sherds, have been catalogued under one registry number (7KT1-168). This analysis will focus on the Trent University Expedition ceramics first, and will discuss the Wortner collection later in the paper.

Study of the pottery in the Trent University collection shows that a large number of the sherds are exfoliated, as mentioned in the field notes. Ferris and Crundwell (1988:12) remark on "friable, crumbling characteristic of the ceramic paste" used in the Springwells Phase ceramics of the Belanger Site. This crumbling characteristic is well represented in the Trent University collection; some sherds appearing to have exfoliated at some point after their initial cataloguing.

A total of 97 of the 381 sherds exhibit sufficient decoration to enable them to be tentatively classified. Many of the ceramics have decorative motifs that are readily identifiable, and some have been classified by matching similar decorative techniques. Of the 97 sherds, 12 are rim sherds. The 97 decorated sherds from the collection can be broken down as follows (see also Figure 2):

Table 1:
Trent Collection of Decorated Ceramics

Younge Phase Body Sherds:	49
Springwells Phase Body Sherds:	35
Unidentifiable Decorated Body Sherds:	1
Younge Phase Rim Sherds:	5
Springwells Phase Rim Sherds:	5
Unidentifiable Rim Sherds:	2

Younge Phase Ceramics: The largest segment of identifiable sherds from this collection can be attributed to the Younge phase. Decorative motifs used on Younge Phase ceramics may vary (Murphy and Ferris 1990:201). Kenyon et al (1988:11-14) write: "Riviere and Younge phase ceramics may be decorated with a wide variety of techniques including linear and dentate stamping, cord-wrapped stick impressions, and incising. Usually the rim exterior is decorated with one or more band of oblique impressions, while the neck may have a more elaborate design. Lips and interiors are usually decorated."

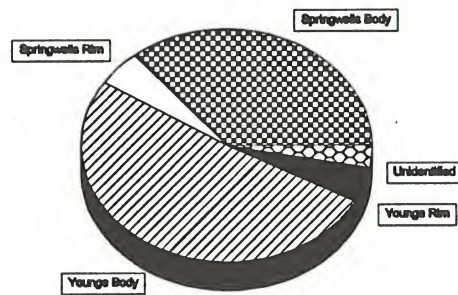


Figure 2: Decorated Ceramics in the Trent University Collections From Krieger.

Linear stamping is the most common technique used on the rim section of Younge Phase ceramics, along with dentate and cord-wrapped stick (Murphy and Ferris 1990:205). The Younge Phase rims from the Krieger site have been decorated using these types of techniques. The most common form of stamping present is an oblique, single, wrapped stick. It's worth noting that while Last (1974:100) states that dentate stamping was found on the ceramics from the site, no examples were readily available.

Younge Phase ceramic vessels are almost always collarless; although during the phase the collar becomes more developed, exhibiting an "incipient" collar (Murphy and Ferris 1990:203). Incipient collars are distinct from "the well pronounced collars of the succeeding Springwells Phase, tending to be a portion of the rim that has been rolled or folded over onto the exterior" (Murphy and Ferris 1990:203). While most the Younge Phase rims from the Krieger collection are collarless, one has an incipient collar.

Figure 3 illustrates one of the rim sherds attributed to the Younge Phase. On the interior surface is one line of oblique incised lines. This pattern of oblique incised lines is repeated with the same or a similar tool on the exterior of the vessel. Murphy and Ferris (1990:202) write: "...interior decoration is simple, consisting of one or occasionally two rows of obliques or, less frequently, horizontal lines." These are usually made by a tool impression or incision and generally are similar to the dominant tool used on the exterior of the vessel.

The exterior surface of the Figure 3 sherd also features a row of punctates, with slight, interior bosses. This is the only sherd from this phase that has this characteristic, although Kidd (1954:158) notes interior bosses on some Krieger ceramics. Murphy and Ferris (1990:205) state that occasionally (10-20%), Younge phase rims exhibit a single row of punctates. Yet while this rim sherd may fit with a description of Younge Phase ceramics, it also shows Glen Meyer characteristics. Noble writes that

"exterior punctation is the favoured technique in the early Glen Meyer Period" (1975:16), and that punctation and corresponding bossing are "important features of developmental and classic Glen Meyer rim sherds" (1975:15). Williamson (1990:298) states that punctates "...most often employed as secondary decoration, occurs on both interior and sometimes exterior vessel surfaces, often with a raised node or "boss" accompanying the punctate on the opposite surface of the vessel."

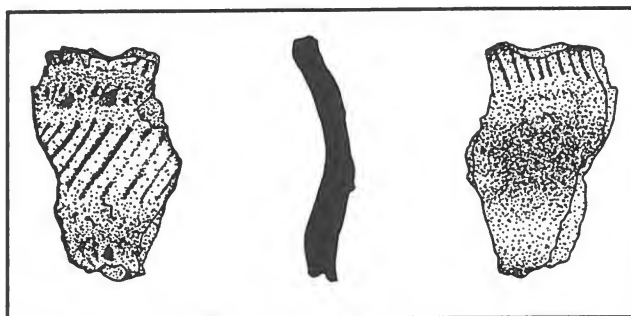


Figure 3: Younger Phase Rim Sherd From the Krieger Site (7KT1-66), Half Actual Size.

The sherd depicted in Figure 3 may display a slight "channelling" (Jamieson 1979: 23-25) on the rim. As Jamieson notes, 50% of the rim sherds from the Slack-Caswell site which had been attributed to the Glen Meyer component had no collar, while the remaining rim sherds exhibited only a slight channelling. Williamson (1990:298) notes that Early Iroquoian vessels have a rim that "is normally collarless". With its channelling, the profile of the Krieger sherd in Figure 3 is very distinct from the other Younger Phase rim sherds. It is possible then that while this sherd may be affiliated with the other Krieger ceramics, it may show that the manufacturer was at least knowledgeable of Glen Meyer forms. This wouldn't be surprising, since as Lennox (1982:111) argues, certain aspects of material culture from the Younger Phase Bruner-Colasanti site do have Glen Meyer characteristics, but that the settlement and subsistence data do indicate a very different way of life from contemporaneous Glen Meyer villages.

Murphy and Ferris (1990:205) state that the neck section of Younger Phase ceramics contains the dominant decorative expression on a given vessel." An incised triangle or diamond motif is considered the "hallmark" of the Younger Phase (Murphy and Ferris 1990:205). Figure 4.a illustrates this common incised triangle design. "Also common on vessels are several rows of oblique stamped impressions" (Murphy and Ferris 1990:205), a technique which can be seen in Figure 4.b.

Of the 49 decorated body sherds attributed to the Younger Phase, one may be a possible pipe bowl fragment. Sherd 7KT1-123 has triangular designs very similar to the rest of the Younger Phase sherds, but the curvature is such that total circumference would have been quite small.

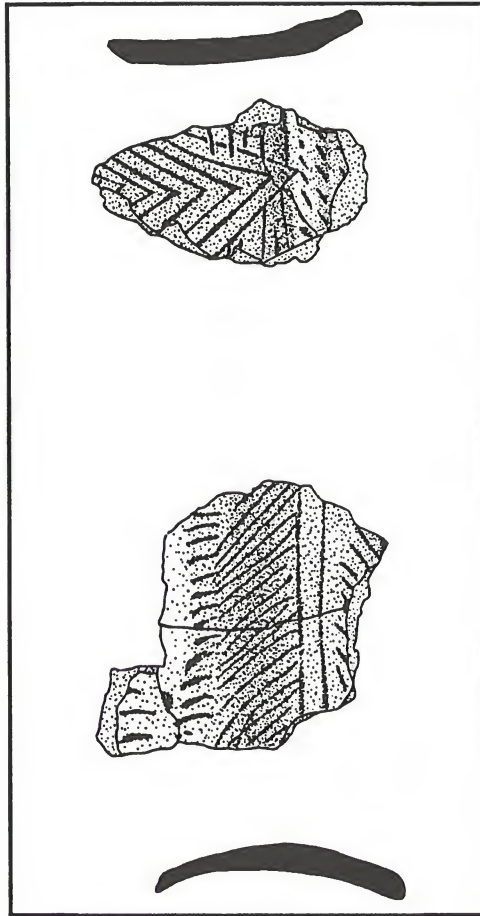


Figure 4: Younger Phase Sherds From Kreiger (7KT1-62 & 162), Half Actual Size.

Springwells Phase Ceramics:

In general, vessel rims of the Springwells Phase are primarily, but not exclusively, collared and castellated and characterized by a number of horizontal, oblique and cordmarked rim motifs. During this phase, collars are well defined and vessel necks become increasingly elongated, cylindrical, and only slightly constricted, merging into the body of the vessel without a distinct neck-shoulder junction. (Murphy and Ferris 1990:209).

One of the distinctive ceramic decorative motifs... is a series of horizontal rows of linear impressions paralleling the rim. This motif is usually produced in a "drag-stamp" or "push-pull" fashion which results in a pattern usually referred to as interrupted linear.... Secondary decoration on the lower edge or directly below the collar usually

consists of a band of short tool-impressed obliques. The remainder of the neck may be smoothed plain, or as is often the case with interrupted linear vessels, the body surface treatment extends up the neck to just below the collar area (Murphy and Ferris 1990:211).

A total of 40 sherds from the Krieger site collection show Springwells Phase characteristics. Ferris and Crundwell (1988:12) state that the ceramics from the Belanger site all exhibit classic Springwells Phase traits, including "the presence of collars, and the predominant use of horizontal motifs, particularly the push-pull technique." This push-pull technique is also represented in the ceramic assemblage from the Krieger site.

One interesting factor concerning the Springwells ceramics is the presence of interior decoration on the rim sherds. Murphy and Ferris (1990:211) argue that the trend in this phase is for a decrease in the use of interior decoration. They state that "for the first time in the Western Basin sequence, these areas of the vessel may be completely undecorated" (Murphy and Ferris 1990:211). In the original study of the Krieger site ceramics, Last (1974:100) wrote that the interior surfaces were "plain except for occasional grass scratching". However, of the five rim sherds identified in the collection as belonging to the Springwells Phase, four displayed interior stamping, and one sherd displayed an interior punctate. Sherd number 7KT1-19 for example shows interior stamping with similar exterior stamping that matches Springwells Phase examples. Sherd number 7KT1-128 has interior fingernail impressions, and exterior stamping, which is very similar to the exterior stamping on sherd number 7KT1-150. Indeed, because these sherds are so similar in terms of design, colour, thickness and texture, and because they are unique in the collection, it is possible that they come from the same pot.

Body Sherds: In the analysis of ceramics from the 1949 excavation, Kidd (1954: 155-157) writes that 70% of the body sherds were treated by "...texturing, probably coarse textiles....A very coarse material was used for texturing in many instances, apparently being applied to the same surface first in one direction and then in another, with the result that the surface is greatly roughened and the pattern largely destroyed."

The majority of undecorated body sherds from the Trent University excavations show this same type of body roughening. The field notes argue that this roughening is "basket-impressed" (Last 1974:100), but it is very difficult to determine what sort of instrument made the pattern. Similar to those collected by Kidd, the body sherds all show evidence of smoothing after the original impression. As a result it is difficult to lift an impression off the surface of the vessels that could identify the tool or combination of tools used. Murphy and Ferris (1990:207) argue that the "mottled, blotchy look" common to Younge Phase body sherds is a result of cord-marking, and note that "ribbed paddle body surfaces" appear in Springwells Phase ceramics (1990:216). Lennox (1982:32) notes that cord roughened body sherds comprised 84% of analyzable body sherds from the Younge Phase Bruner-Colasanti Site. Wright (1966:29-30) argues that fabric impressed body sherds are "most common on the earliest Glen Meyer sites." The general technique seems similar in all cases, and few of the body sherds in the collection have been assigned to one specific cultural affiliation. All the sherds show a high level of similarity in terms of technique, temper, and texture.

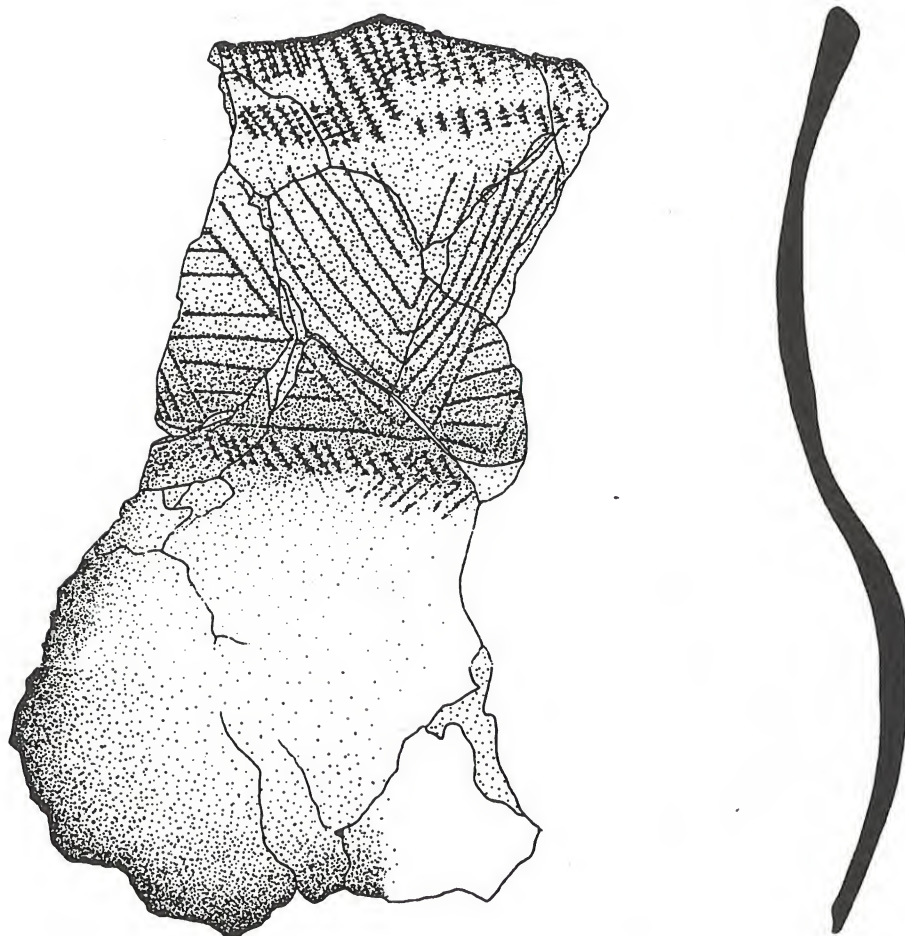


Figure 5: Young Phase Vessel Section From the Wortner Collection (7KT1-168), One Fifth Actual Size.

Wortner Ceramic Cluster: While the 150 sherds from the Krieger site donated by Stan Wortner to Trent University have no accompanying provenience, they are beautiful examples of Young Phase ceramics, and have been partially reconstructed (see Figure 5). Murphy and Ferris (1990:203) write that "one of the distinguishing characteristics of Young Phase vessels is the use of the extended neck as a large canvas." The vessel illustrated in Figure 5 is a good example of this. The incised motif on the neck segment of the vessel is a classic example of Young Phase decoration. The exterior rim section shows single-element stamping, which has been smoothed in some places to produce a horizontal band.

Murphy and Ferris (1990:202) write that "castellations occur on 30-50% of vessels during the Young Phase, always as multiple castellations." The presence of castellations can also be seen in this example.

The majority of sherds in the Wortner collection are undecorated body sherds, with a very similar body treatment to those recovered by Trent University in 1970. However, there are enough decorated rim and neck sherds to suggest that two distinct decorative motifs are present. In addition, the colour and texture of the pottery is similar for all sherds. It seems likely that there are at least two pots present in the collection. However, Fox (1982:6) has shown that while one style of decoration may be used on one section of a vessel, a different style may be used on another section of the same vessel. Still, the number of sherds that do not fit the reconstruction argue for more than one vessel.

Unidentified Decorated Sherds: Three decorated sherds, two rims and one body sherd, are problematic. One of the rim sherds, as well as the unidentified body sherd, appear to be from the same vessel. This castellated rim sherd (Figure 6) features incised lines that seem to form a pattern of nested rectangles with triangular motifs. The most peculiar feature of this rim is a line of square to rectangular punctates without corresponding interior bosses. The body sherd exhibits very similar incised lines. Kidd (1954:174) notes that the Krieger ceramics he analyzed featured distinct "outlined and filled triangles and rectangles, and zoned effects as design elements". He also observes incised "large rectangles and rhombi" (Kidd 1954:158). However, incised rectangles fit into neither Murphy and Ferris' (1990) discussion of Western Basin ceramics, nor into Fitting's (1965) discussion of Late Woodland ceramics for southeastern Michigan.

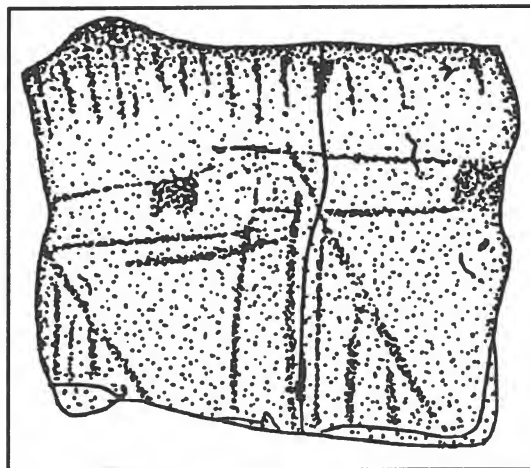


Figure 6: Unidentified Rim Sherd From Krieger (7KT1-10), Actual Size.

The final unidentified rim sherd (7KT1-1) is yellowish in colour with a fine black temper. It has a very faint series of incised obliques on the interior surface. The type of clay used is unique in the collection, as is the extremely slanted rim profile. This profile is completely different from all the other sherds present in the collection, and approximates the profile of the Onondaga Triangular ware described by MacNeish (1952:144-145) and Emerson (1968:119), although the decoration is different. The piece was surface collected (Last 1974).

CONCLUSIONS

The majority of ceramics from the Krieger site fit into two of Fitting's (1965) ceramic types in his classification of southeastern Michigan pottery types. Both of these belong to what he calls Riviere Ware (Fitting 1965:154). The first type is Vase Tool-impressed, which features cord-marked, fabric impressed and roughened surfaces, oblique to vertical tool impressions, castellations, and collared and uncollared variants (Fitting 1965:155). He dates this type as Late Woodland, and notes that Kidd's collection contains ceramics that fit this type (Fitting 1965:155).

The second type is Vase Corded, which features predominantly roughened surfaces, oblique to vertical impressions, with cord-wrapped stick and cord-wrapped paddle impressions (Fitting 1965:155-156). Again, he notes that the ceramics Kidd identified as "Krieger Stamped" may be an uncollared example of the Vase Corded style (Fitting 1965:156).

Comparison with later work shows that the Krieger site not only has a Younger Phase component, as argued by Murphy and Ferris, but also has a definite Springwells Phase component. In addition, it seems possible that there is evidence that the people at this site interacted with Glen Meyer groups.

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